

The installation of solid fuel-burning appliances (woodstoves, inserts, etc) in site-built structures is regulated by Table 3-A of the 1997 Uniform Mechanical Code and Clark County Code Section 14.12. If you have a mobile or modular home, please contact the Washington State Department of Labor and Industries at 312 Stonemill Drive, Suite 120 in Vancouver, telephone (360)896-2371 for a woodstove permit.

## Permits required for all stoves and inserts

Permits are required for the installation of all solid fuel burning appliances. A permit for the installation of a woodstove can be obtained from the Clark County Permit Center, located on the first floor of the Public Service Center at 1300 Franklin Street, Vancouver. If a contractor is installing the stove, the contractor's valid license card must be submitted with the permit request. The price of a permit for the installation of a woodstove or fire-place insert is \$81.12.

### Listed woodstoves and inserts

Woodstoves and inserts which are approved or "listed" by approved testing agencies such as Underwriters Laboratories (UL) or the International Conference of Building Officials (ICBO) are strongly recommended. These units have been tested and approved under extreme conditions. All new woodstove and fireplace insert installations must be EPA certified. These "listed" stoves and inserts must be installed according to the manufacturer's instructions, and the instructions must be posted with the permit at the time of the Building Inspector's visit. The manufacturer's metal placard must remain affixed to the stove for the duration of the installation in the structure.

#### **Unlisted woodstoves and inserts**

Unlisted appliances are any appliances that have not been approved by a recognized testing agency. An insert is any part of the appliance that fits inside the firebox. All fireplace inserts installed in Clark County must be listed. Most unlisted appliances, regardless of manufacturer, are required to be placed at least 36 inches from unprotected combustible walls and materials. A combustible wall is a wall that contains wood and includes walls that are surfaced with drywall or plaster. Heat is transferred directly through these materials to the wood framing. With an unlisted stove, there is no guarantee the design of the stove will meet the requirements of the Uniform Mechanical Code. Unlisted fireplace inserts will not be approved for use in Clark County.

#### **Used woodstoves and inserts**

No used solid fuel burning device shall be installed in new or existing buildings unless such device is EPA certified or a pellet stove either certified or exempt from certification by the EPA. Exception: antique wood cook stoves and heaters manufactured prior to 1940.

## Floor protection under stoves and inserts

All solid fuel-burning appliances must have at least 4 inches of open space under the fire chamber. Floor protection under the fire chamber should consist of non-combustible material such as hollow metal, stone, concrete, tile, or other approved non-combustible material with a minimum thickness of 3/8 inch.

The floor protection must extend 12 inches beyond the sides and rear of the appliance. Floor protection must extend at least 16 inches in front of the side of the appli-

Community Development Permit Center 1300 Franklin Street, Vancouver, Washington Phone: (360) 397-2375 Fax: (360) 397-6049 Hours: M-T-Th-F 8:00 am to 4:30 pm, open at 10:00 am on Wednesday

701 E. Main Street, Battle Ground, Washington Phone: (360) 687-7126 Fax: (360) 759-5058 Hours: M-T-Th-F 8:00 am to 4:00 pm, closed 12-1pm open at 1:00 pm on Wednesday,s

Battle Ground Service Center

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ance that opens. Appliances installed in garages shall be a minimum of 18 inches above the floor.

## **Hearth extensions (inserts)**

Hearths should be installed for use with any fireplace or insert. Hearths should extend at least 16 inches from the front of the firebox opening and at least 8 inches beyond each side of the stove/insert.

The standard minimum clearance from the firebox to a combustible wall is 36 inches. If there is not enough space in the room to accomplish this, a noncombustible heat shield may be created using the materials and clearances shown in figure 1. Thicknesses shown for materials are minimums only. All clearances should be measured from the outer surface of the appliance to the combustible material disregarding any intervening protection applied to the combustible material. Spacers must be of approved non-combustible material such as metal, ceramic, concrete, brick or stone.

All synthetic rock, decorative material, or adhesive used in the installation must be listed and approved as a noncombustible material by an approved testing agency. Sheetrock is not an approved material for wall protection.

#### **Combustion** air

Woodstoves are required to have tight fitting metal or ceramic glass doors. They are required to have a source from outside the structure of primary combustion air, connected to the appliance as per the manufacturer's specifications. The air inlet shall originate as a point below the fire box. The duct shall be four inches or greater in diameter, not exceed 20 feet in length, and be installed as per manufacturer's instructions; or be certified and tested and modified as required by the Washington State Ventilation and Indoor Air Quality code Section 402.2.

## **Chimneys**

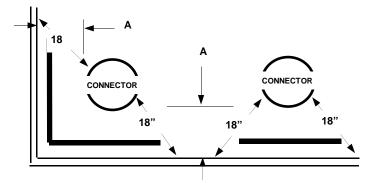
Chimneys shall be constructed of masonry in accordance with the current adopted version of the Uniform Building Code and the requirements of the Masonry Institute of Washington, or they shall be approved, factory-built assemblies "listed" and approved by Underwriters Labo-

ratories (UL), the International Conference of Building Officials (ICBO), or other recognized agencies for use with wood burning or other solid fuel burning appliances. The approved chimney assemblies shall be installed in accordance with their listings. The required clearance from the chimney to combustibles will be indicated on each section of chimney. The minimum clearance for a masonry chimney is 2 inches. All chimneys must have a cleanout and an approved liner. Metal liners installed in masonry chimneys or relined chimneys shall be of approved "listed" materials and installed in accordance with the listing.

### **Chimney connectors**

A chimney connector shall not be connected to a chimney flue serving a fireplace. When installing the connector (stovepipe) to the chimney, you must maintain 18 inches of clearance between the pipe and any combustible material, or use approved material to reduce clearance, or use an approved and "listed" chimney connector. Chimney connectors shall be pitched upward from the appliance at least one-quarter inch per foot. there should be no dips, sags, or downward pitch from the appliance. A connector shall be as short and straight as possible, and shall be securely supported, with joints fastened with 3 sheet metal screws, rivets, or other approved means. The appliance shall be located as close as practical to the chimney.

**NOTE:** "A" represents the typical horizontal dimension reduction allowed by table 5-B in the Uniform Mechanical Code.



## **Chimney height termination**

The chimney shall terminate at a point not less than 2 feet above any portion of a structure within a 10 foot radius of the chimney.

## **Required clearances**

TYPE OF PROTECTION FOR RADIANT APPLIANCES		REQUIRED CLEARANCES FROM COMBUSTIBLE MATERIALS		
		ABOVE	SIDES AND REAR	CHIMNEY CONNECTOR
1. 2.	None Number 28 manufacturer's 24" standard gauge steel spaced one inch and vented	36" 12"	36" 9"	18"
3.	4" common brick spaced one inch and vented	18"	12"	9"
4.	3/8" ceramic tile or equivalent on 1/2" wonderboard spaced 1 inch and vented.	18"	12"	9"

# Typical woodstove or fireplace stove installation

